CLAIMS

What is claimed is:

1. A compound of Formula (I), (II), (III), (IV) or (V), or a pharmaceutically acceptable salt thereof,

wherein the compound of Formula (I) is:

$$Z_3$$
 $O-Y_3$
 N
 X_3
 O
 $O-Y_3$
 N
 O
 O

wherein:

 X_3 is:

(1) -CH(CH₃)₂;

(2) $-C(CH_3)_3$;

(3)

$$-\frac{1}{8}$$
 (CH₂)₂ $-$ R₁₅ R₁₅ ; or

(4)

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 Y_3 is $-C(O)-C_6H_5$ or D_1 ;

Z₃ is:

(1)

(3)

5 R_{10} is:

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- (1) $-C(O)-(CH_2)_k-CH_3$;
- (2) -O-CH₂-CH=CH₂;
- (3) a hydrogen;
- (4) methyl;
- 10 (5) methoxy;
 - (6) cyclopentyl;
 - (7) halo;
 - (8) $-O-CH_2-C(O)-ND_1-CH_3$;
 - (9) cyano;
 - (10) -CH2-CH=CH2; or

(11)

 R_{11} is a hydrogen, methyl or a halo; or

 R_{10} and R_{11} taken together are $W_4\hbox{-} U_4\hbox{-} V_4;$

wherein W₄-U₄-V₄ is

(1)
$$-CH=C(R_{14})-ND_{1}$$
;

- (2) $-CH=CH-CH_2-;$
- (3) –CH₂-CH=CH-;
- (4) -CH=CH-CH=CH-;
- (5) -O-CH₂-CH(ONO₂)-CH₂-;
- (6) ---O-C(O)-CH=CH-;
- (7) –(CH₂)₂-C(O)-ND₁-;
- (8) -(CH₂)₃-C(O)-;
- (9) -CH₂-CH(OD₁)-CH(OD₁)-CH₂-;
- (10) -S-(CH₂)₃-;

(11)

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(12)

R₁₂ is:

15 (1) $-ND_1-C(O)-(CH_2)_k-CH_3$;

- (2) $-(CH_2)_k$ -C(O)-OD₁;
- (3) $-C(O)-(CH_2)_k-CH_3$;
- (4) halo;
- $(5) -ND_1-C(O)-N(C_2H_5)_2;$
- (6) $-CH_2-C(O)-N(H)D_1$;
- (7) -O-C(O)-CH₃;

(8)

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(9)

- (10) -CH₂-O-(CH₂)₂-O-CH(CH₃)₂;
- (11) methyl; or

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(12) $-(CH_2)_2$ -O-CH₃;

R₁₃ is a hydrogen, methyl or halo;

R₁₄ is a hydrogen or a lower alkyl;

 R_{15} at each occurrence is independently selected from -OCH₃, -OD₁, -NO₂, methyl or ND₁-S(O)₂-CH₃;

k is an integer from 0 to 4;

 D_1 is a hydrogen, V_3 or K;

 $\label{eq:Kis} K \ is \ -(W_3)_a - E_b - (C(R_e)(R_f))_{p1} - E_c - (C(R_e)(R_f))_x - (W_3)_d - (C(R_e)(R_f))_y - (W_3)_i - E_j - (W_3)_g - (C(R_e)(R_f))_z - U_3 - V_3;$

 V_3 is -NO or -NO₂;

a, b, c, d, g, i and j are each independently an integer from 0 to 3;

 p_1 , x, y and z are each independently an integer from 0 to 10;

 W_3 at each occurrence is independently -C(O)-, -C(S)-, -T₃-, -(C(R_e)(R_f))_h-, an alkyl group, an aryl group, a heterocyclic ring, an arylheterocyclic ring, or - (CH₂CH₂O)_{q1}-;

E at each occurrence is independently $-T_3$ -, an alkyl group, an aryl group, $-(C(R_e)(R_f))_h$ -, a heterocyclic ring, an arylheterocyclic ring, or $-(CH_2CH_2O)_{q1}$ -;

 T_3 at each occurrence is independently a covalent bond, a carbonyl, an oxygen, - $S(O)_o$ - or - $N(R_a)R_i$;

h is an integer form 1 to 10;

q₁ is an integer from 1 to 5;

 $R_{\rm e}$ and $R_{\rm f}$ are each independently a hydrogen, an alkyl, a cycloalkoxy, a halogen, a hydroxy, an hydroxyalkyl, an alkoxyalkyl, an arylheterocyclic ring, an alkylaryl, an alkylcycloalkyl, an alkylheterocyclic ring, a cycloalkylalkyl, a cycloalkylthio, an arylalklythio, an arylalklythioalkyl, an alkylthioalkyl a cycloalkenyl, an

heterocyclicalkyl, an alkoxy, a haloalkoxy, an amino, an alkylamino, a dialkylamino, an arylamino, a diarylamino, an alkylarylamino, an alkoxyhaloalkyl, a sulfonic acid, a sulfonic ester, an alkylsulfonic acid, an arylsulfonic acid, an arylalkoxy, an alkylthio, an arylthio, a cyano an aminoalkyl, an aminoaryl, an aryl, an arylalkyl, an alkylaryl, a carboxamido, a alkylcarboxamido, an arylcarboxamido, an amidyl, a carboxyl, a carbamoyl, an alkylcarboxylic acid, an arylcarboxylic acid, an alkylcarbonyl, an arylcarboxylic ester, an arylcarboxylic ester, an arylcarboxylic ester, a sulfonamido, an alkylsulfonamido, an arylsulfonamido, an alkylsulfonyl, an alkylsulfonyloxy, an arylsulfonyl, arylsulphonyloxy, a sulfonic ester, an alkyl ester, an aryl ester, a urea, a phosphoryl, a nitro, K or R_e and R_f taken together with the carbons to which they are attached form a carbonyl, a methanthial, a heterocyclic ring, a cycloalkyl group, an aryl group, an oxime, a hydrazone or a bridged cycloalkyl group;

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 U_3 at each occurrence is independently an oxygen, -S(O)₀- or -N(R_a)R_i; o is an integer from 0 to 2;

Ra is a lone pair of electrons, a hydrogen or an alkyl group;

 R_i is a hydrogen, an alkyl, an aryl, an alkylcarboxylic acid, an arylcarboxylic acid, an alkylcarboxylic ester, an arylcarboxylic ester, an alkylcarboxamido, an arylcarboxamido, an alkylaryl, an alkylsulfinyl, an alkylsulfonyl, an alkylsulfonyl, an alkylsulfonyloxy, an arylsulfinyl, an arylsulfonyl, arylsulphonyloxy, a sulfonamido, a carboxamido, a carboxylic ester, an aminoalkyl, an aminoaryl, $-CH_2-C(U_3-V_3)(R_e)(R_f)$, a bond to an adjacent atom creating a double bond to that atom, $-(N_2O_2-)^{-\bullet}M_1^{+\bullet}$, wherein $M_1^{+\bullet}$ is an organic or inorganic cation; and

with the proviso that the compounds of Formula (I) must contain at least one NO group, and/or at least one NO₂ group; wherein the at least one NO group and/or the at least one NO₂ group is linked to the compound through an oxygen atom, a nitrogen atom or a sulfur atom; and

the compound of Formula (II) is:

wherein:

5 Y₄ is:

(1) R₁₅

(2) CH₂-O-CH₃

10 (3)

(4)

(5)

(6)

$$\begin{array}{c} & & & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ &$$

(7)

X₄ is:

(1) methyl;

(2)

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15

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(3)
$$\begin{array}{c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

(4)

$$CH_2-ND_1-C-N$$

 Z_4 and Z_4 ' are independently selected from a methyl or a hydrogen;

R₁₆ is:

(1) hydrogen;

(2) $-C(O)-N(D_1)H$;

(3) –S(O)-CH₃; or

 $(4) -S(O)_2-N(D_1)H;$

R₁₇ is a hydrogen, -OCH₃ or -NO₂;

o₁ is an integer from 0 to 2;

R₁₅ and D₁ are as defined herein; and

with the proviso that the compounds of Formula (II) must contain at least one NO group, and/or at least one NO₂ group; wherein the at least one NO group and/or the at least one NO₂ group is linked to the compound through an oxygen atom, a nitrogen atom or a sulfur atom; and

the compound of Formula (III) is:

$$X_6$$
 X_6
 X_6

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5

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wherein:

 X_6 is:

 $(1) - U_3D_1;$

(2) -O-CH₂-CH₃; or

20 (3)

Y₆ is:

 $(1) - CH_2 - S - R_{21};$

(2)

(3)

5

(4)
$$\begin{array}{c} & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

(5)

W₆ is:

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(2)

(1)

(3)

(4)

V₆ is a hydrogen;

Z₆ is:

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- (1) hydrogen;
- (2) methyl; or
- (3) $-(CH_2)_4-N(H)D_1$;

 R_{19} and R_{20} are a hydrogen; or

R₁₉ and R₂₀ taken together are an oxo; or

10 R₂₀ and W₆ taken together are:

(1)

(2)

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R₂₁ is:

- (1) -C(O)-CH₂-CH₃;
- (2) hydrogen;
- (3) K; or
- (4)

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 R_{22} is $-U_3D_1$ or $-OCH_2$ - CH_3 ;

D₁, U₃ and K are as defined herein; and

with the proviso that the compounds of Formula (III) must contain at least one NO group, and/or at least one NO₂ group; wherein the at least one NO group and/or the at least one NO₂ group is linked to the compound through an oxygen atom, a nitrogen atom or a sulfur atom; and

the compound of Formula (IV) is:

wherein:

 B_6 is:

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rhyth CH₂ ; or

(2) a nitrogen;

G₆ is:

15 (1)

CH₂

(2)

(1)

The S

D₆ is:

20 (1)

TH2 ; or

or B₆ and D₆ taken together form a phenyl ring;

Q₆ is a hydrogen; or

B₆ is a nitrogen and Q₆ is CH₂ and taken together form the ring:

U₃ and D₁ are as defined herein; and

with the proviso that the compounds of Formula (IV) must contain at least one NO group, and/or at least one NO₂ group; wherein the at least one NO group and/or the at least one NO₂ group is linked to the compound through an oxygen atom, a nitrogen atom or a sulfur atom; and

the compound of Formula (V) is:

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

wherein:

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X₇ is a hydrogen;

Y₇ is

or X_7 and Y_7 taken together are:

R₂₃ is a hydrogen or -OCH₃;

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R₂₂, U₃ and D₁ are as defined herein; and

with the proviso that the compounds of Formula (V) must contain at least one NO group, and/or at least one NO₂ group; wherein the at least one NO group and/or the at least one NO₂ group is linked to the compound through an oxygen atom, a nitrogen atom or a sulfur atom.

- 2. A composition comprising the compound of claim 1 and a pharmaceutically acceptable carrier.
- The compound of claim 1, wherein the compound of Formula (I) is a 3. nitrosated acebutolol, a nitrosylated acebutolol, a nitrosated and nitrosylated acebutolol, a nitrosated alprenolol, a nitrosylated alprenolol, a nitrosated and nitrosylated alprenolol, a nitrosated atenolol, a nitrosylated atenolol, a nitrosated and nitrosylated atenolol, a nitrosated befunolol, a nitrosylated befunolol, a nitrosated and nitrosylated befunolol, a nitrosated betaxolol, a nitrosylated betaxolol, a nitrosated and nitrosylated betaxolol, a nitrosated bevantolol, a nitrosylated bevantolol, a nitrosated and nitrosylated bevantolol, a nitrosated bisoprolol, a nitrosylated bisoprolol, a nitrosated and nitrosylated bisoprolol, a nitrosated bopindolol, a nitrosylated bopindolol, a nitrosated and nitrosylated bopindolol, a nitrosated bucindolol, a nitrosylated bucindolol, a nitrosated and nitrosylated bucindolol, a nitrosated bucumolol, a nitrosylated bucumolol, a nitrosated and nitrosylated bucumolol, a nitrosated bufetolol, a nitrosylated bufetolol, a nitrosated and nitrosylated bufetolol, a nitrosated bunitrolol, a nitrosylated bunitrolol, a nitrosated and nitrosylated bunitrolol, a nitrosated bupranolol, a nitrosylated bupranolol, a nitrosated and nitrosylated bupranolol, a nitrosated butofilolol, a nitrosylated butofilolol, a nitrosated and nitrosylated butofilolol, a nitrosated carazolol, a nitrosylated carazolol, a nitrosated and nitrosylated carazolol, a nitrosated carteolol, a nitrosylated carteolol, a nitrosated and nitrosylated carteolol, a nitrosated celiprolol, a nitrosylated celiprolol, a nitrosated and nitrosylated celiprolol, a

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nitrosated cetamolol, a nitrosylated cetamolol, a nitrosated and nitrosylated cetamolol, a nitrosated cloranolol, a nitrosylated cloranolol, a nitrosated and nitrosylated cloranolol, a nitrosated esmolol, a nitrosylated esmolol, a nitrosated and nitrosylated esmolol, a nitrosated indenolol, a nitrosylated indenolol, a nitrosated and nitrosylated indenolol, a nitrosated levobunolol, a nitrosylated levobunolol, a nitrosated and nitrosylated levobunolol, a nitrosated mepindolol, a nitrosylated mepindolol, a nitrosated and nitrosylated mepindolol, a nitrosated metipranolol, a nitrosylated metipranolol, a nitrosated and nitrosylated metipranolol, a nitrosated metoprolol, a nitrosylated metoprolol, a nitrosated and nitrosylated metoprolol, a nitrosated moprolol, a nitrosylated moprolol, a nitrosated and nitrosylated moprolol, a nitrosated nadolol, a nitrosylated nadolol, a nitrosated and nitrosylated nadolol, a nitrosated nipradilol, a nitrosylated nipradilol, a nitrosated and nitrosylated nipradilol, a nitrosated oxprenolol, a nitrosylated oxprenolol, a nitrosated and nitrosylated oxprenolol, a nitrosated penbutolol, a nitrosylated penbutolol, a nitrosated and nitrosylated penbutolol, a nitrosated pindolol, a nitrosylated pindolol, a nitrosated and nitrosylated pindolol, a nitrosated practolol, a nitrosylated practolol, a nitrosated and nitrosylated practolol, a nitrosated propranolol, a nitrosylated propranolol, a nitrosated and nitrosylated propranolol, a nitrosated talinolol, a nitrosylated talinolol, a nitrosated and nitrosylated talinolol, a nitrosated tertatolol, a nitrosylated tertatolol, a nitrosated and nitrosylated tertatolol, a nitrosated tilisolol, a nitrosylated tilisolol, a nitrosated and nitrosylated tilisolol, a nitrosated timolol, a nitrosylated timolol, a nitrosated and nitrosylated timolol, a nitrosated toliprolol, a nitrosylated toliprolol, a nitrosated and nitrosylated toliprolol, a nitrosated xibenolol, a nitrosylated xibenolol, a nitrosated and nitrosylated xibenolol; the compound of Formula (II) is a nitrosated amosulalol, a nitrosylated amosulalol, a nitrosated and nitrosylated amosulalol, a nitrosated arotinolol, a nitrosylated arotinolol, a nitrosated and nitrosylated arotinolol, a nitrosated bufuralol, a nitrosylated bufuralol, a nitrosated and nitrosylated bufuralol, a nitrosated carvedilol, a nitrosylated carvedilol, a nitrosated and nitrosylated carvedilol, a nitrosated dilevalol, a nitrosylated dilevalol, a nitrosated and nitrosylated dilevalol, a nitrosated labetalol, a nitrosylated labetalol, a nitrosated and nitrosylated labetalol, a nitrosated landiolol, a nitrosylated landiolol, a nitrosated and nitrosylated landiolol, a nitrosated nifenalol, a

nitrosylated nifenalol, a nitrosated and nitrosylated nifenalol, a nitrosated pronethalol, a nitrosylated pronethalol, a nitrosated and nitrosylated pronethalol, a nitrosated sotalol, a nitrosylated sotalol, a nitrosated and nitrosylated sotalol, a nitrosated sulfinalol, a nitrosylated sulfinalol, a nitrosated and nitrosylated sulfinalol; the compound of Formula (III) is a nitrosated alacepril, a nitrosylated alacepril, a nitrosated and nitrosylated alacepril, a nitrosated captopril, a nitrosylated captopril, a nitrosated and nitrosylated captopril, a nitrosated ceronapril, a nitrosylated ceronapril, a nitrosated and nitrosylated ceronapril, a nitrosated enalapril, a nitrosylated enalapril, a nitrosated and nitrosylated enalapril, a nitrosated enalaprilat, a nitrosylated enalaprilat, a nitrosated and nitrosylated enalaprilat, a nitrosated fosinopril, a nitrosylated fosinopril, a nitrosated and nitrosylated fosinopril, a nitrosated imidapril, a nitrosylated imidapril, a nitrosated and nitrosylated imidapril, a nitrosated lisinopril, a nitrosylated lisinopril, a nitrosated and nitrosylated lisinopril, a nitrosated moveltipril, a nitrosylated moveltipril, a nitrosated and nitrosylated moveltipril, a nitrosated perindopril, a nitrosylated perindopril, a nitrosated and nitrosylated perindopril, a nitrosated ramipril, a nitrosylated ramipril, a nitrosated and nitrosylated ramipril, a nitrosated spirapril, a nitrosylated spirapril, a nitrosated and nitrosylated spirapril, a nitrosated trandolapril, a nitrosylated trandolapril, a nitrosated and nitrosylated trandolapril; the compound of Formula (IV) is a nitrosated benazepril, a nitrosylated benazepril, a nitrosated and nitrosylated benazepril, a nitrosated cilazapril, a nitrosylated cilazapril, a nitrosated and nitrosylated cilazapril, a nitrosated temocapril, a nitrosylated temocapril, a nitrosated and nitrosylated temocapril; the compound of Formula (V) is a nitrosated delapril, a nitrosylated delapril, a nitrosated and nitrosylated delapril, a nitrosated moexipril, a nitrosylated moexipril, a nitrosated and nitrosylated moexipril, a nitrosated quinapril, a nitrosylated quinapril, a nitrosated and nitrosylated quinapril, or a pharmaceutically acceptable salt thereof.

4. The compound of claim 1, wherein K is:

$$(1) - Y - (CR_4R_4')_p - T - (CR_4R_4')_p - ONO_2;$$

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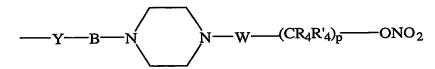
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(2)



wherein T is ortho, meta or para;

(3)



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- $(4) Y (CR_4C_4')_p V B T (CR_4R_4')_p ONO_2;$
- $(5) Y (CR_4R_4')_p T C(O) (CR_4R_4')_0 (CH_2) ONO_2;$
- $(6) Y (CR_4R_4')_p C(Z) (CH_2)_q T (CR_4R_4')_q (CH_2) ONO_2;$
- $(7) Y (CR_4R_4')_0 T (CH_2)_0 V (CR_4R_4')_0 (CH_2) ONO_2;$

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- $(8) Y (CR_4R_4')_0 V (CH_2)_0 V (CR_4R_4')_0 (CH_2) ONO_2;$
- $(9) Y (CR_4R_4')_0 (W)_q (CR_4R_4')_0 (CH_2) ONO_2;$
- $(10) -NR_{i}-O-(CH_{2})_{o}-V-(CR_{4}R_{4}')_{q}-(CH_{2})-ONO_{2};$
- $(11) -NR_i -O -(CH_2)_o -(W)_q -(CR_4R_4')_q -(CH_2) -ONO_2;$
- (12) $-O-NR_{i}-(CH_{2})_{o}-(W)_{a}-(CR_{4}R_{4}')_{a}-(CH_{2})-ONO_{2};$

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- $(13) Y (CH_2)_o (W)_q (CH_2)_o V (CR_4R_4')_o Q' (CR_4R_4')_o (CH_2) ONO_2;$
- $(14) Y (CR_4R_4')_0 V (CH_2)_0 (W)_q (CR_4R_4')_q (CH_2) ONO_2;$
- $(15) -O-NR_{i}-(CH_{2})_{o}-V-(CR_{4}R_{4}')_{q}-(CH_{2})-ONO_{2};$
- $(16) Y (CR_4R_4')_0 Q' (CR_4R_4')_0 V (CR_4R_4')_0 (CH_2) ONO_2;$
- $(17) Y (CR_4R_4')_0 Q' (CR_4R_4')_0 (W)_0 (CR_4R_4')_0 (CH_2) ONO_2;$

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- $(18) Y (CR_4R_4')_p T (CR_4R_4')_p Q' (CR_4R_4')_o (CH_2) ONO_2;$
- $(19) Y (CR_4R_4')_q C(Z) (CR_4R_4')_o (CH_2) ONO_2;$
- $(20) Y (CR_4R_4')_p Q' (CR_4R_4')_0 (CH_2) ONO_2;$
- $(21) Y (CR_4R_4')_q P(O)MM';$
- $(22) Y (CR_4R_4')_0 Q' (CR_4R_4')_0 (CH_2) ONO_2;$

- $(23) Y (CR_4R_4')_0 Q' (CR_4R_4')_0 T (CR_4R_4')_0 (CH_2) ONO_2;$
- $(24) Y (CR_4R_4')_q (W)_q (CR_4R_4')_o Q' (CR_4R_4')_o (CH_2) ONO_2;$
- $(25) Y (CR_4R_4')_q V (CR_4R_4')_o Q' (CR_4R_4')_o (CH_2) ONO_2;$

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(26) - Y - (CR_4R_4')_p - (T)_o - (W)_q - (CR_4R_4')_o - (CH_2) - ONO_2;
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$$(27) - Y - (CR_4R_4')_p - (W)_q - (T)_0 - (CR_4R_4')_0 - (CH_2) - ONO_2;$$

$$(28) - Y - (CR_4R_4')_q - C(Z) - V - (CR_4R_4')_q - (CH_2) - ONO_2;$$

$$(29) - Y - (CR_4R_4')_0 - C(R_4)(ONO_2) - (CR_4R_4')_0 - (T)_0 - (W)_0 - (CR_4R_4')_0 - R_5;$$

$$(30) - Y - (CR_4R_4')_0 - V - (CR_4R_4')_0 - Q' - (CR_4R_4')_0 - (CH_2) - ONO_2;$$

$$(31) - Y - (CR_4R_4')_q - C(Z) - Q' - (CR_4R_4')_o - (CH_2) - ONO_2;$$

$$(32) - Y - (CR_4R_4')_p - V - (CR_4R_4')_p - (CH_2) - ONO_2;$$

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$$(33) - Y - (CR_4R_4')_p - V - (CH_2)_q - (T)_0 - (CR_4R_4')_q - (CH_2) - ONO_2;$$

$$(34) - Y - (CR_4R_4')_p - (T)_o - Q' - (T)_o - (CR_4R_4')_q - (CH_2) - ONO_2;$$

$$(35) - Y - (CR_4R_4')_q - C(Z) - (CR_4R_4')_q - V - (CR_4R_4')_o - Q' - (CR_4R_4')_o - (CH_2) - ONO_2;$$

$$(36) - Y - (CR_4R_4')_q - C(Z) - (CR_4R_4')_q - (W)_q - (CR_4R_4')_0 - Q' - (CR_4R_4')_0 - (CH_2) - ONO_2;$$

$$(38) - NR_j - O - (CH_2)_o - (W)_q - (CR_4R_4')_o - Q' - (CH_2) - ONO_2;$$

$$(39) - O-NR_j-(CH_2)_0-(W)_q-(CR_4R_4')_0-Q'-(CH_2)-ONO_2;$$

$$(40) -O-NR_{j}-(CH_{2})_{o}-V-(CR_{4}R_{4}')_{o}-Q'-(CH_{2})-ONO_{2};$$

$$(41) - NR_{j} - NR_{j} - (CR_{4}R_{4}')_{p} - (W)_{q} - (T)_{o} - (CR_{4}R_{4}')_{o} - (CH_{2}) - ONO_{2}; \ or \ \ CR_{4}R_{4}'')_{o} - (CH_{2}) - ONO_{2}; \ or \ \ CR_{4}R_{4}'')_{o} - (CR_{4}R_{4}'')_{o} - (CR_{4}R_$$

$$(42) - Y - (CR_4R_4')_0 - Q' - (CR_4R_4')_0 - ONO_2$$
; or

$$(43) - Y - (CR_4R_4')_0 - V - (CR_4R_4')_0 - Q - (CR_4R_4')_0 - ONO_2;$$

R₄ and R₄' at each occurrence are independently a hydrogen, lower alkyl group, -OH, -CH₂OH, -ONO₂, -NO₂ or -CH₂ONO₂; or R₄ and R₄' taken together with the carbon atom to which they are attached are a cycloalkyl group or a heterocyclic ring;

W is a covalent bond or a carbonyl group;

T at each occurrence is independently an oxygen, (S(O)_o)_o or NR_j;

 R_j is a hydrogen, an alkyl group, an aryl group, a heterocyclic ring, an alkylcarbonyl group, an alkylaryl group, an alkylsulfinyl group, an alkylsulfonyl group, an arylsulfinyl group, a sulfonamido group, a N-alkylsulfonamido group, a N,N-diarylsulfonamido group, a N-arylsulfonamido group, a N-alkyl-N-arylsulfonamido group, a carboxamido group or a hydroxyl group;

p at each occurrence is independently an integer from 1 to 6;

q at each occurrence is independently an integer from 1 to 3; o at each occurrence is independently an integer from 0 to 2; Y is independently a covalent bond, a carbonyl, an oxygen, -S(O)₀- or -NR_j; B is either phenyl or (CH₂)₀;

Q' is a cycloalkyl group, a heterocyclic ring or an aryl group;

Z is (=O), (=N-OR₅), (=N-NR₅R'₅) or (= $CR_5R'_5$);

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M and M' are each independently $-O^-H_3N^+-(CR_4R'_4)_q-CH_2ONO_2$ or $-T-(CR_4R'_4)_o-CH_2ONO_2$; and

R₅ and R₅' at each occurrence are independently a hydrogen, a hydroxyl group, an alkyl group, an aryl group, an alkylsulfonyl group, an arylsulfonyl group, a carboxylic ester, an alkylcarbonyl group, an arylcarbonyl group, a carboxamido group, an alkoxyalkyl group, an alkoxyaryl group, a cycloalkyl group or a heterocyclic ring.

5. The compound of claim 1, wherein K is:

(7)

(4)

(6)

(8)

$$\sqrt[3]{\sqrt[4]{1}}$$
 $\sqrt[4]{1}$ $\sqrt[4]{1}$

(10)
'>-\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\fr

(13)

wherein T' maybe ortho, meta or para

(15)

(21)

(23)

(14)

(16)

(20)

(22)

(24)

(25)

$$R_6$$
 N_{0}
 N_{0}
 N_{0}
 N_{0}
 N_{0}

(33)

$$(R_8)_2$$
 $(R_8)_2$
 $(R_8)_2$
 $(R_8)_2$
 $(R_8)_2$

(37)

(38)

(41)

42)
$$X_{5} \longrightarrow X_{5} \longrightarrow X_{0}$$

$$X_{5} \longrightarrow X_{0}$$

$$X_{0} \longrightarrow X_{0}$$

(45)

wherein:

Y' a covalent bond, a carbonyl, an oxygen, -S(O)₀- or -NR₆;

T' is oxygen, sulfur or NR₆;

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 X_5 is oxygen, $(S(O)_0)_0$ or NR_6 ;

R₆ is a hydrogen, a lower alkyl group, an aryl group;

R₇ is a lower alkyl group or an aryl group;

R₈ at each occurrence is independently is a hydrogen, a hydroxyl group, a lower alkyl group, an aryl group, -NO₂, -CH₂-ONO₂ or -CH₂-OH;

n' and m' are each independently an integer from 0 to 10; and o is an integer from 0 to 2.

6. The compound of claim 1, wherein the compound of Formula (I) is compound of Formula (VI), (VII), (VIII), (IX) or (X); the compound of Formula (II) is a compound of Formula (XI); the compound of Formula (III) is a compound of Formula (XII), (XIII), (XIV), (XVI), (XVII) or (XVIII); the compound of Formula (IV) is a compound of Formula (XIX); and the compound of Formula (V) is a compound of Formula (XX) or (XXI); or a pharmaceutically acceptable salt thereof,

wherein the compound of Formula (VI) is:

$$H_3C$$
 $NH-Rm-Rn$
 $NH-Rm-Rn$
 $NH-Rm-Rn$
 $NH-Rm-Rn$
 $NH-Rm-Rn$
 $NH-Rm-Rn$
 $NH-Rm-Rn$

and the compound of Formula (VII) is:

$$H_3C$$
 H_3C
 H_3C
 H_3C
 H_3C
 H_3C
 H_3C

(VII)

and the compound of Formula (VIII) is:

$$H_3C$$
 $(VIII)$

and the compound of Formula (IX) is:

5 (IX)

and the compound of Formula (X) is:

$$S$$
 N
 CH_3
 CH_3

and the compound of Formula (XI) is:

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and the compound of Formula (XII) is:

and the compound of Formula (XIII) is:

and the compound of Formula (XIV) is:

$$\begin{array}{c|c} & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

and the compound of Formula (XV) is:

and the compound of Formula (XVI) is:

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and the compound of Formula (XVII) is:

and the compound of Formula (XVIII) is:

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and the compound of Formula (XIX) is:

(XIX)

and the compound of Formula (XX) is:

and the compound of Formula (XXI) is:

wherein

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T' is oxygen, sulfur or NR₆;

R₆ is a hydrogen, a lower alkyl group, an aryl group;

R_m-R_n taken together can be a hydrogen atom; or

 R_{m} is:

(i) -C-(O)-;

(ii) $-C-(O)-NR_6$;

(iii) -C(O)-O-;

(iv) -C(O)-S;

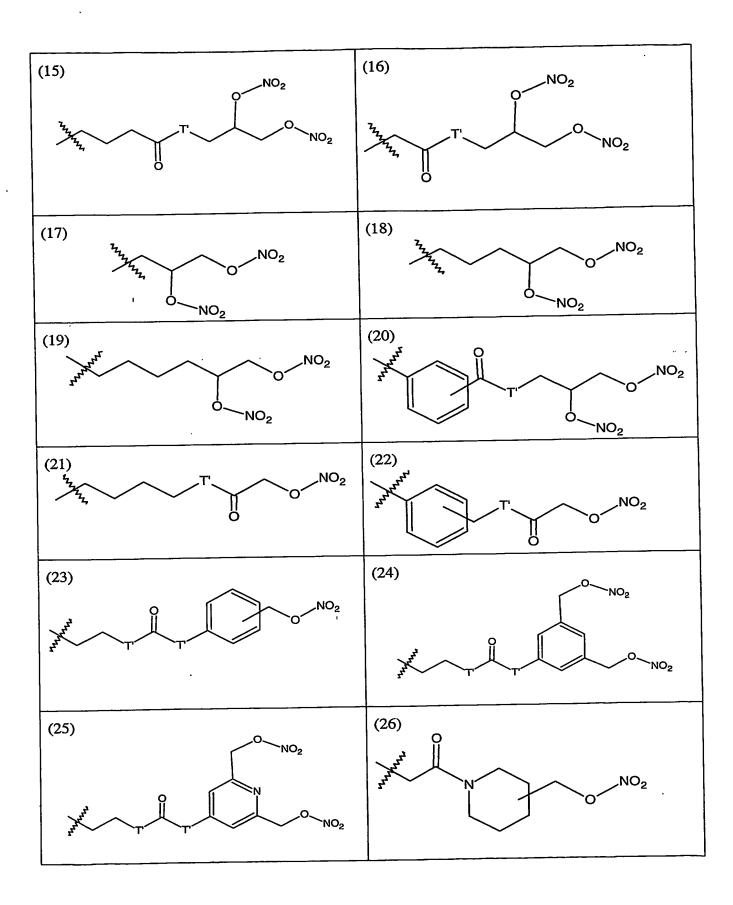
(v) $-CH_2-O-$; or

(vi) -CH(CH₃)-O-;

R_n is:

20 a hydrogen or

(1) NO ₂	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
(3) NO ₂	(4) T' NO ₂
(5) NO ₂	(6) NO ₂
(7) NO ₂	(8) NO2
(9) O NO ₂	(10) ***********************************
(11) T' ONO ₂	(12) ***********************************
(13)	(14) NO ₂ NO ₂



wherein:

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R9 is a lower alkyl group;

T' is oxygen, sulfur or NR₆;

R₆ is a hydrogen, a lower alkyl group, an aryl group; and with the proviso that the compounds of Formula (IV) to Formula (XXI) must contain at least one –NO₂ group.

- 7. A method for treating a cardiovascular disease in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 2.
- 8. The method of claim 7, wherein the cardiovascular disease is congestive heart failure, restenosis, hypertension, diastolic dysfunction, a coronary artery disease, myocardial infarction, cerebral infarction, atherosclerosis, atherogenesis, cerebrovascular disease, angina, aneurysm, ischemic heart disease, cerebral ischemia, myocardial ischemia, thrombosis, platelet aggregation, platelet adhesion, smooth

muscle cell proliferation, a vascular or non-vascular complication associated with the use of a medical device, a wound associated with the use of a medical device, vascular or non-vascular wall damage, peripheral vascular disease, neointimal hyperplasia following percutaneous transluminal coronary angiograph, vascular grafting, coronary artery bypass surgery, a thromboembolic event, post-angioplasty restenosis, coronary plaque inflammation, hypercholesterolemia, embolism, stroke, shock, arrhythmia, atrial fibrillation or atrial flutter, or thrombotic occlusion and reclusion cerebrovascular incident.

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- 9. The method of claim 8, wherein the cardiovascular disease is congestive heart failure, hypertension or diastolic dysfunction.
 - 10. A method for treating a renovascular disease in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 2.
 - 11. The method of claim 10, wherein the renovascular disease is renal failure or renal insufficiency.
 - 12. A method for treating a disease resulting from oxidative stress; treating an endothelial dysfunction; treating a disease caused by endothelial dysfunction; treating cirrhosis; treating pre-eclampsia; treating osteoporosis; or treating nephropathy in a patient in need thereof comprising administering to the patient a therapeutically effective amount of the composition of claim 2.
 - 13. The composition of claim 2, further comprising (i) at least one therapeutic agent; (ii) at least one nitric oxide donor compound; or (iii) at least one therapeutic agent and at least one nitric oxide donor compound.
 - 14. The composition of claim 13, wherein the therapeutic agent is an aldosterone antagonist, an alpha-adrenergic receptor antagonist, an angiotensin II antagonist, an angiotensin-converting enzyme inhibitor, an antidiabetic compound, an anti-hyperlipidemic compound, an antioxidant, an antithrombotic and vasodilator compound, a β-adrenergic antagonist, a calcium channel blocker, a digitalis, a diuretic, an endothelin antagonist, a hydralazine compound, a H₂ receptor antagonist, a neutral endopeptidase inhibitor, a nonsteroidal antiinflammatory compound, a phosphodiesterase inhibitor, a potassium channel blocker, a platelet reducing agent, a

proton pump inhibitor, a renin inhibitor, a selective cyclooxygenase-2 inhibitor, or a combination of two or more thereof.

15. The composition of claim 14, wherein the therapeutic agent is at least one compound selected from the group consisting of an aldosterone antagonist, an angiotensin II antagonist, an angiotensin-converting enzyme inhibitor, a β-adrenergic antagonist, a diuretic and a hydralazine compound.

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- 16. The composition of claim 15, wherein the aldosterone antagonist is eplerenone or spironolactone; the angiotensin II antagonist is candesartan cilexetil, eprosartan mesylate, irbesartan, losartan potassium, medoxomil, telmisartan, trandolapril, trandolaprilat or valsartan; the angiotensin-converting enzyme inhibitor is benazepril hydrochloride, captopril, enalapril maleate, fosinopril śodium, lisinopril, moexipril hydrochloride, quinapril hydrochloride; the β-adrenergic antagonist is bisoprolol fumarate, carvedilol, metoprolol tartrate, propranolol hydrochloride or timolol maleate; the diuretic is amiloride hydrochloride, chlorthalidone, hydrochlorothiazide or triamterene; and the hydralazine compound is hydralazine hydrochloride.
- 17. The composition of claim 13, wherein the nitric oxide donor compound is selected from the group consisting of a S-nitrosothiol, a nitrite, a nitrate, a S-nitrosthiol, a sydnonimine, a NONOate, a N-nitrosoamine, a N-hydroxyl nitrosamine, a nitrosimine, a diazetine dioxide, an oxatriazole 5-imine, an oxime, a hydroxylamine, a N-hydroxyguanidine, a hydroxyurea or a furoxan.
- 18. The method of claim 7, 10 or 12, further comprising administering (i) at least one therapeutic agent; (ii) at least one nitric oxide donor compound; or (iii) at least one therapeutic agent and at least one nitric oxide donor compound.
- The method of claim 18, wherein the therapeutic agent is an aldosterone antagonist, an alpha-adrenergic receptor antagonist, an angiotensin Π antagonist, an angiotensin-converting enzyme inhibitor, an antidiabetic compound, an antihyperlipidemic compound, an antioxidant, an antithrombotic and vasodilator compound, a β-adrenergic antagonist, a calcium channel blocker, a digitalis, a diuretic, an endothelin antagonist, a hydralazine compound, a H₂ receptor antagonist, a neutral endopeptidase inhibitor, a nonsteroidal antiinflammatory compound, a

phosphodiesterase inhibitor, a potassium channel blocker, a platelet reducing agent, a proton pump inhibitor, a renin inhibitor, a selective cyclooxygenase-2 inhibitor, or a combination of two or more thereof.

- The method of claim 19, wherein the therapeutic agent is at least one compound selected from the group consisting of an aldosterone antagonist, an angiotensin II antagonist, an angiotensin-converting enzyme inhibitor, a β -adrenergic antagonist, a diuretic and a hydralazine compound.
- 21 The method of claim 20, wherein the aldosterone antagonist is eplerenone or spironolactone; the angiotensin II antagonist is candesartan cilexetil, eprosartan mesylate, irbesartan, losartan potassium, medoxomil, telmisartan, trandolapril, trandolaprilat or valsartan; the angiotensin-converting enzyme inhibitor is benazepril hydrochloride, captopril, enalapril maleate, fosinopril sodium, lisinopril, moexipril hydrochloride or quinapril hydrochloride; the β-adrenergic antagonist is bisoprolol fumarate, carvedilol, metoprolol tartrate, propranolol hydrochloride or timolol maleate; the diuretic is amiloride hydrochloride, chlorthalidone, hydrochlorothiazide or triamterene; and the hydralazine compound is hydralazine hydrochloride.
- 22. The method of claim 18, wherein the nitric oxide donor compound is selected from the group consisting of a S-nitrosothiol, a nitrite, a nitrate, a S-nitrothiol, a sydnonimine, a NONOate, a N-nitrosoamine, a N-hydroxyl nitrosamine, a nitrosimine, a diazetine dioxide, an oxatriazole 5-imine, an oxime, a hydroxylamine, a N-hydroxyguanidine, a hydroxyurea or a furoxan.
 - 23. A kit comprising at least one compound of claim 1.
- 24. The kit of claim 23, further comprising further comprising (i) at least one therapeutic agent; (ii) at least one nitric oxide donor compound; or (iii) at least one therapeutic agent and at least one nitric oxide donor compound.
- 25. The kit of claim 24, wherein the (i) at least one therapeutic agent; (ii) at least one nitric oxide donor compound; or (iii) at least one therapeutic agent and at least one nitric oxide donor compound are in the form of separate components in the kit.

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